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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

JACKSON, MONIQUE R

ART UNIT PAPER NUMBER

1773

DATE MAILED: 03/18/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/627,312

Applicant(s)

KUCERA, HALMUT W.

Examiner

Monique R Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

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DETAILED ACTION

1. The amendment filed 12/26/02 has been entered. Claims 1-48 are pending in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Terminal Disclaimer

3. The terminal disclaimer filed on 12/26/02 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent 6,476,119 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

4. Claims 1-11, 13-15, 22-35, 37-39 and 46-48 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 99/37722 (WO'722) for the reasons recited in the prior office action and restated below.
5. WO'722 teaches an aqueous autodepositable metal surface treatment composition that includes:
 - (A) an aqueous dispersion of a phenolic novolak resin (*as in instant claims 1,3,10,22 and 24, 27, 30, 31*) that includes a reaction product of:
 - (i) a phenolic resin precursor,
 - (ii) a modifying agent wherein the agent includes:
 - (a) at least one functional moiety that enables the modifying agent to react with the phenolic resin precursor, and
 - (b) at least one ionic moiety, and

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(c) comprises a structure represented by formula Ia or Ib (*as in instant claims 23 and 25*)

(iii) at least one multi-hydroxyl phenolic compound, and

(B) an acid, preferably phosphoric acid (*as in instant claims 1, 8, 9*), and further includes,

(C) a flexibilizer (*as in instant claim 7*), and

(D) a control agent

wherein the control agent is any material able to improve the formation of an autodeposited coating on a metallic surface and optionally improve the formation of another autodeposited coating applied after the control agent-containing autodeposited coating, such as a nitro compound, a nitroso compound, an oxime compound, a nitrate compound, or a similar material (*accelerator as in instant claims 2, 11, 14, 29, 35 and 47; Abstract; Page 3, line 12-Pages 4, lines 2; Page 6, lines 1-11; Pages 7-9; Page 14, lines 29-32; Page 15, lines 12-27; Claims 1 and 7.*) WO'722 teach that the aqueous metal treatment composition improves adhesion to subsequent coatings such as primers and adhesives to the metal surface, improves corrosion resistance, requires a minimum number of coatings of less than 3, and can activate a metal surface for autodeposition of a subsequently applied coating or primer that includes a dispersed phenolic resin as described above, such as a primer described in more detail in commonly-owned U.S. Provisional Patent Application 60/072779, incorporated by reference, which includes an aqueous dispersed phenolic resin (*as in instant claims 1, 4, 5, 26, 27, 33; Page 21, lines 1-8*). WO'722 further teach that since the dispersed phenolic resin (A) is a novolak, a curative should be introduced in order to cure the film formed by the metal treatment composition and can be applied by the application of a curative-containing topcoat over the metal treatment film (Page 20, lines 12-22.) WO'722 teach that typically the metal treatment composition is applied to a

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metal surface and then dried and then a curative-containing topcoat or primer, such as a topcoat containing an aldehyde donor compound such as methylol phenolic compounds and/or an aromatic nitroso (oxo-nitrogen) compound, preferably dinitroso aromatic compounds, especially dinitrosobenzenes and dinitrosonaphthalenes (*blister suppressing agent or oxidizing agent as in instant claims 1, 13, 14, 15, 27, 28, 32, 37, 38, 39*), is applied to the thus treated metal surface (*as in instant claims 27, 46-48*, Page 20, lines 12-22; Page 22, lines 8-31.) WO'722 further teach an example wherein the metal treatment conversion composition is autodeposited to a metal surface, dried, and then a primer composition comprising a phenolic resole, a naphthalenesulfonate, sodium salt, water, polyvinyl alcohol-stabilized resole and dichlorobutadine homopolymer (*flexibilizers as in instant claims 6 and 34*) is autodeposited as a primer coating on the treated metal surface which is then dried, and then the treated and primed metal surface is overcoated with an adhesive to adhere the treated and primed metal surface to an injection molded elastomer (*as in instant claims 46-48*; Examples, particularly example 5.)

6. Claims 1-11, 13, 22-35, 37 and 46-48 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 99/37713 (WO'713) for the reasons recited in the prior office action and restated below.

WO'713 teaches a electrodepositable primer or coating composition that includes an aqueous dispersion of (A) a phenolic resin, (B) a flexibilizer, and (C) an aldehyde donor compound (*blister suppressing agent/oxidizing agent*) that can be used as a primer for polymer-to-metal adhesion wherein the coating can be applied to an activated metallic surface and then topcoated with an adhesive overcoat and then bonded to a polymer surface such as an elastomeric material; and wherein the activated metallic surface can be formed by applying and

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drying an autodepositable, aqueous metal treatment conversion composition comprising (A') an aqueous dispersion of a phenolic novolak resin, (B') an acid, preferably phosphoric acid, (C') a flexibilizer (*as in instant claim 7*), and (D') a control agent (*accelerator as in instant claims 1-10, 13, 26-34, 37, 46-48*; Abstract; Page 4, lines 24-32; Page 22, line 19-Page 23, line 2; Page 24, lines 11-25; Page 25, lines 3-32; Page 26, lines 1-29; Page 28, line 19-Page 29, line 21; Examples.) WO'713 teaches that the aqueous dispersion phenolic novolak resin (A') of the treatment composition can be the same as the phenolic resin in the primer composition which includes a reaction product of: (i) a phenolic resin precursor; (ii) a modifying agent wherein the agent includes: (a) at least one functional moiety that enables the modifying agent to react with the phenolic resin precursor, and (b) at least one ionic moiety, and (c) comprises a structure represented by formula Ia or Ib (*as in instant claims 23 and 25*); and (iii) at least one multi-hydroxyl phenolic compound (*as in instant claims 22-25*; Page 25, lines 27-32; Page 7-Page 10.) WO'713 teaches that the control agent is any material that is able to improve the formation of an autodeposited coating on a metallic surface and may be a nitro compound, a nitroso compound, an oxime compound, a nitrate compound, or a similar material (*accelerator as in instant claims 11 and 35*; Page 27, lines 6-30.)

Claim Rejections - 35 USC § 103

7. Claims 12, 16-21, 36 and 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO'722 in view of DebRoy et al (USPN 4,755,418) or Dobbstein et al (USPN 4,780,524) or Nakashio et al (USPN 5,908,911) for the reasons recited in the prior office action and restated below.

The teachings of WO'722 are discussed above. WO'722 teaches that the autodepositable treatment composition further comprises a control agent that can be any compound that is able to improve the formation of an autodeposited coating on a metallic surface such as nitrates or oximes but does not teach that the control agent is hydroxylamine (Page 25, lines 10-23.) However, hydroxylamine is a known functional equivalent to oximes in electrodepositable aqueous compositions as evidenced by DebRoy et al (Col. 4, lines 4-15) or Dobbstein et al (Col. 7, lines 37-44) or Nakashio et al (Col. 3, lines 37-62) wherein it is known in the art that oximes or hydroxylamines act to control the curing of the electrodeposited composition. Hence, in terms of claims 12, 20, 21, 36, 44 and 45, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize hydroxylamine, a known functional equivalent to oximes, in the invention taught by WO'722. Further, WO'722 teaches that though the control agent is especially useful in the metal treatment composition of the invention, it could also be useful in any multi-component composition that includes an autodepositable component and that the control agent is preferably an organic nitro compound such as nitroguanidine and nitro or dinitrobenzenesulfonate and salts thereof, and is more preferably a mixture of nitroguanidine and sodium nitrobenzenesulfonate for commercial availability and regulatory reasons (Page 23, lines 15-29; Page 25, lines 10-32. Hence, in terms of claims 16-19, 38-39, 40-43, considering WO'722 teach that the subsequently applied primer composition is also an electrodepositable aqueous multi-component phenolic composition similar to that of the metal treatment composition, it would have been obvious to one having ordinary skill in the art to include a similar control agent in the electrodepositable primer coating composition as well given that WO'722 teach that a control agent can be utilized in any electrodepositable coating

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composition to improve the formation of the autodeposited coating on the metal surface, wherein WO'722 teach that an especially preferred control agent for commercial availability and regulatory reasons is a mixture of nitroguanidine and sodium nitrobenzenesulfonate.

8. Claims 12 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO'713 in view of DebRoy et al (USPN 4,755,418) or Dobbstein et al (USPN 4,780,524) or Nakashio et al (USPN 5,908,911) for the reasons recited in the prior office action and restated below.

The teachings of WO'713 are discussed above. WO'713 teaches that the autodepositable metal treatment composition comprises a control agent that can be any compound that is able to improve the formation of an autodeposited coating on a metallic surface such as nitrates or oximes but does not teach that the control agent is hydroxylamine (Page 27, lines 6-30.) However, hydroxylamine is a known functional equivalent to oximes in electrodepositable aqueous compositions as evidenced by DebRoy et al (Col. 4, lines 4-15) or Dobbstein et al (Col. 7, lines 37-44) or Nakashio et al (Col. 3, lines 37-62) wherein it is known in the art that oximes or hydroxylamines act to control the curing of the electrodeposited composition. Hence, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize hydroxylamine, a known functional equivalent to oximes, in the invention taught by WO'713.

Double Patenting

9. Claims 1-48 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6-8, 12, 15, 19, 21-22, 26, 28, 33-44, and 50-59 of

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U.S. Patent No. 6,383,307 in view of WO'722 for the reasons recited in the prior office action and restated below.

USPN 6,383,307 claims an aqueous autodeposition composition comprising a phenolic resin that is the reaction product of a phenolic compound with an aldehyde compound, an acid and at least one control agent selected from a nitro compound, a nitroso compound, an oxime compound and a nitrate compound; and a method of applying the composition to a metallic surface and a method of applying a second autodeposition composition or adhesive primer or adhesive covercoat as claimed in claims 38, 53 and 54. Though USPN'307 specifically claims the same components of the instant invention individually in various independent or dependent claims (1, 6-8, 12, 15, 19, 21-22, 26, 28, 33-37, 39-44, 50-52, 55-59), USPN'307 does not specifically claim the same combination as in the instant application. However, WO'722, as discussed above, teaches or renders obvious the instantly claimed combinations wherein it specifically discloses that the phenolic resin is preferably the same as the resin of the instant invention with the same modifying agents and further teaches that the metal treatment composition is electrocoated to the metallic surface, dried and then an electrodeposited primer composition as instantly claimed is provided over the treated composition so that the treated and primed metallic surface can be overcoated with an adhesive and adhered to an elastomer material. Considering WO'722 teach that the control agent may be oximes or like materials, hydroxylamines would have been obvious to one skilled in the art given that they are known functional equivalents to oximes. Further, considering WO'722 teaches that the control agent is especially useful in the metal treatment composition of the invention but could also be useful in any multi-component composition that includes an autodepositable component and that the

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control agent is preferably an organic nitro compound such as nitroguanidine and nitro or dinitrobenzenesulfonate and salts thereof, and is more preferably a mixture of nitroguanidine and sodium nitrobenzenesulfonate for commercial availability and regulatory reasons, it would have been obvious to one having ordinary skill in the art to include a similar control agent in the electrodepositable primer coating composition as well given that WO'722 teach that a control agent can be utilized in any electrodepositable coating composition to improve the formation of the autodeposited coating on the metal surface.

Response to Arguments

10. Applicant's arguments and declaration filed 12/26/02 have been considered but are not persuasive. The Applicant argues that the rejections based on WO'713 and WO'722 have been obviated because WO'713 and WO'722 allegedly do not qualify as prior art because they were commonly assigned at the time of filing of the present application. Applicant argues that WO'713 and WO'722 correspond to USPN 6,476,119 and USPN 6,383,307, respectively, and hence the declaration pursuant to 37 CFR 1.130 disqualifies them as prior art and overcomes the rejections under 35 U.S.C. 102(a). However, it is noted that a declaration under 37 CFR 1.130 is only applicable for overcoming a rejection under 35 USC 103(a) based on U.S. Patent that qualifies as prior art under 35 U.S.C. 102(e) and does not overcome the rejections under 35 USC 102(a) based on the two WO published documents which were published prior to the filing date of the instant application. Considering the inventive entity of the two WO published documents is different from the instant application but includes the inventor of the instant application, an affidavit or declaration under 37 CFR 1.131 or 37 CFR 1.132 may be submitted to overcome the rejections (refer to MPEP §715.01(c) and §2132.01.) With regards to the obviousness double

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patenting rejection, the Examiner notes that the rejection was correctly based on U.S. Patent No. 6,383,307 in view of WO'722 wherein the disclosure of WO'722 was utilized as a secondary reference under 35 U.S.C. 102(a) to meet the limitations of the instant invention that were not specifically present in the claims of USPN 6,383,307. Therefore, the Examiner maintains the rejections as set forth in the prior office action and restated above.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read 'Monique R. Jackson', with a stylized, cursive script.

Monique R. Jackson
Primary Examiner
Technology Center 1700
March 17, 2003